

Further, the Examiner has raised the issue that Locke et al. anticipates the present claims by a single line in the program coding, namely "It might also be possible to adjust the coding gain for this factor." (Col. 5, lines 11-13) The Applicant respectfully submits that this simple hypothetical does not place the invention in the possession of the public domain and thus is not sufficient grounds to anticipate the present invention, as the reference does not in any way enablingly teach the invention. See MPEP 2121.01.

"The single reference must have an enabling disclosure." See *Advanced Display Systems Inc. v. Kent State University*, 54 USPQ 2d 1673, 1679 (Fed. Cir. 2000)("Accordingly, invalidity by anticipation requires that the four corners of a single, prior art document describe every element of the claimed invention, expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation.")(emphasis added); See also, *PPG Industries, Inc. v. Guardian Industries Corp.*, 37 USPQ 2d 1618, 1624 (Fed. Cir. 1996)("To anticipate a claim, a reference must disclose every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter.")

"It is well settled that prior art under 35 U.S.C. § 102 (b) must sufficiently describe the claimed invention to have placed the public in possession of it. In *re Sasse*, 629 F.2d 675, 681, 207 U.S.P.Q. (BNA) 107, 111 (CCPA 1980); In *re Samour*, 571 F.2d at 562, 197 U.S.P.Q. at 4; see also *Reading & Bates Construction Co. v. Baker Energy Resources Corp.*, 748 F.2d 645, 651-52, 223 U.S.P.Q. (BNA) 1168, 1173 (Fed. Cir.1984). Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention. See In *re LeGrice*, 301 F.2d at 939, 133 U.S.P.Q. at 373-74. Accordingly, even if the claimed invention is disclosed in a printed publication, that disclosure will not suffice as

prior art if it was not enabling. In re Borst, 52 C.C.P.A. 1398, 345 F.2d 851, 855, 145 U.S.P.Q. (BNA) 554, 557 (1965), cert. denied, 382 U.S. 973, 83 S. Ct. 537, 15 L. Ed. 2d 465 (1966). It is not, however, necessary that an invention disclosed in a publication shall have actually been made in order to satisfy the enablement requirement.” In re John A. Donohue, 766 F.2d 531, 533, 226 U.S.P.Q. 619 (Fed. Cir. 1985)

“Invalidity based on anticipation requires that the assertedly anticipating disclosure enabled the subject matter of the reference without undue experimentation.” Elan Pharmaceuticals, Inc. and Athena Neurosciences, Inc. v. Mayo Foundation for Medical Education and Research, 346 F.3d 1051, 68 U.S.P.Q.2d 1373 (Fed. Cir. 2003) To serve as an anticipating reference, the reference must enable that which it is asserted to anticipate. Id at 1054. “The issue is whether [the reference’s] teachings enabled a person of ordinary skill, without undue experimentation, to produce the desired [invention].” Id. at 1057. “To anticipate the reference must also enable one of skill in the art to make and use the claimed invention.” Bristol-Myers Squibb v. Ben Venue Laboratories, Inc. 246 F.3d 1368, 1374, 58 U.S.P.Q. 1508, 1512 (Fed. Cir. 2001)

“A reference contains an ‘enabling disclosure’ if the public was in possession of the claimed invention before the date of invention.” MPEP 2121.01.

In the present instance, there is no enabling disclosure of using coding gain for dynamically selecting error correction parameters by establishing a relationship between the FEC parameters and a coding gain. Locke does not even teach that adjusting the coding gain “is” possible or desired, only that it “might” be possible. This does not satisfy the requirement of enablingly disclosing an invention. Obviously, if it were a simple matter, Locke would have taught such an alternative embodiment with sufficient details for one of ordinary skill in the art to make such a version. However, this simple statement that it

“might” be possible is non-enabling as it does not teach one of ordinary skill in the art how to produce such a device without undue experiment. Tellingly, Locke does not refer to this line of code in the detailed description in any way. Further, Locke does not teach how the coding gain could be adjusted or for what reason. Nor does Locke teach that the coding gain would need to be adjusted for any other reason than to adjust for the trellis coding. There is also no teaching “why” such an embodiment might be desirable either or how it would fit in with the embodiment described by Locke. And there is no teaching that the coding gain be set to a minimum predetermined value.

The Examiner also alleges that “transmitter power” (Col. 4, lines 3-6) is listed as a “parameter.” Locke states “Of course, p depends upon the transmitter power, noise power, and bit rate (constellation density); and channel analysis essentially estimates p .” However, Locke does not say that transmitter power is a variable that should be “set to a minimum predetermined value” and then “incrementally increased” and “repeated until maximum coding gain is reached.” Locke merely recognizes that there is a relation between p and coding gain. Locke does not use the transmission power as a variable in *determining* the maximum transmission rate, Locke merely recognizes that the variable p depends in part upon the transmission power. Locke certainly does not enablingly teach the iterative method of changing the coding gain as one of the parameters for optimal codeword selection in the disclosed algorithm in col. 5, lines (10-12) See above.

The Examiner’s provided definition of coding gain as an industry standard does not provide the elements missing in Locke, namely that the present invention is to an improved method for dynamically selecting error correction parameters by establishing a relationship between the FEC parameters and a coding gain. In fact, in the specification and in the previous response, Applicant has maintained that coding gain is the “difference

in power that the non-error correcting system would require to transmit data of a specified bit error rate as compared to the power required by the error correcting system.” ¶21 Locke et al. merely shows data rate as affected by the Reed-Solomon parity bytes required to meet the maximum—allowed corrected bit error rate by selection of codeword configuration. Nowhere in the patent does Locke et al. mention or teach the use of “coding gain” or transmission power as a variable or a key in determining the maximum transmission rate.

Therefore, the present invention reads over Locke, as Locke does not *enablingly* or otherwise teach or disclose the present invention. For these reasons, the application should be allowed over the art of record.

Issues On Appeal

In the event that an appeal is filed, it is requested that this amendment be entered for purposes of appeal.

No further consideration or new matter

The proposed amendment does not raise any new issues that require further consideration and/or search and is a bona fide effort to satisfactorily conclude the prosecution of this application. Accordingly, it is respectfully requested that the proposed amendment be entered and that this application be favorably considered by the Examiner and passed to issue as expeditiously as possible.

Summary

Applicants have made a diligent and bona fide effort to answer each and every ground for rejection or objection to the specification including the claims and to place the application in condition for final disposition. Reconsideration and further examination is respectfully requested, and for the foregoing reasons, Applicant respectfully submits that this application is in condition to be passed to issue and such action is earnestly solicited. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Robert N. Blackmon, Applicants' Attorney at 703-684-5633 to satisfactorily conclude the prosecution of this application.

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Respectfully submitted,



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